

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA
ATLANTA DIVISION

ROTHSCHILD CONNECTED
DEVICES INNOVATIONS, LLC,

Plaintiff,

v.

THE COCA-COLA COMPANY,

Defendant.

CIVIL ACTION FILE
NO. 1:16-CV-1241-TWT

OPINION AND ORDER

This is a patent infringement lawsuit. It is before the Court for a Claims Construction Order regarding ten¹ disputed claim terms in U.S. Patent No. 8,417,377 (“the ‘377 Patent”).

I. Background

The Plaintiff Rothschild Connected Devices Innovations, LLC is the owner of a patent for “a system and method for creating a personalized consumer product.”²

¹ The parties initially disputed the meaning of the term “valve.” However, both parties have since agreed that “valve” requires no construction and should be given its ordinary meaning. *See* Def.’s Notice of Claim Construction Positions, Ex. A.

² ‘377 Patent, 1:1-2.

The patented subject matter relates to a system in which a consumer can customize a product and transmit these product preferences to a dispenser with mixing capabilities. The claim at issue here, Claim 11, involves a beverage dispenser. The Defendant The Coca-Cola Company “makes, uses, offers to sell, and sells” a soda fountain named “the Freestyle” which the Plaintiff alleges infringes upon the ‘377 patent.³

II. Legal Standard

The construction of claims in a patent case is a matter of law for the Court.⁴ In construing patent claims, the Court looks first to the intrinsic evidence. The intrinsic evidence consists of the patent itself, the claim terms, the specification (or written description), and the patent prosecution history, if in evidence.⁵ However, not all intrinsic evidence is equal.⁶ First among intrinsic evidence is the claim language.⁷ A “bedrock principle” of patent law is that the claims of the patent define the patentee’s

³ Compl. ¶ 15.

⁴ *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

⁵ *Microsoft Corp. v. Multi-Tech Sys., Inc.*, 357 F.3d 1340, 1346 (Fed. Cir. 2004).

⁶ *Digital Biometrics, Inc. v. Identix, Inc.*, 149 F.3d 1335, 1344 (Fed. Cir. 1998).

⁷ *Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1305 (Fed. Cir. 1999).

invention.⁸ Thus, the Court’s focus must “begin and remain centered on the language of the claims themselves, for it is that language that the patentee chose to use to particularly point out and distinctly claim the subject matter which the patentee regards as his invention.”⁹ When reading claim language, terms are generally given their ordinary and customary meaning, which is the meaning that the term would have to a person of ordinary skill in the art at the time of the invention.¹⁰

As a result, an objective baseline from which to begin claims construction is to determine how a person of ordinary skill in the relevant art would understand the terms.¹¹ Although “the claims of the patent, not its specifications, measure the invention,”¹² the person of ordinary skill in the art is deemed to read the claim terms in the context of the entire patent, including the specification, rather than solely in the

⁸ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc).

⁹ *Gillette Co. v. Energizer Holdings, Inc.*, 405 F.3d 1367, 1370 (Fed. Cir. 2005) (quoting *Interactive Gift Express, Inc. v. Compuserve Inc.*, 256 F.3d 1323, 1331 (Fed. Cir. 2001)); see also *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995) (“The written description part of the specification itself does not delimit the right to exclude. That is the function and purpose of claims.”).

¹⁰ *Phillips*, 415 F.3d at 1313-14.

¹¹ *Id.* at 1313.

¹² *Smith v. Snow*, 294 U.S. 1, 11 (1935).

context of the particular claim in which the disputed term appears.¹³ For instance, the patentee may act as his own lexicographer and set forth a special definition for a claim term.¹⁴

Claims are part of a “fully integrated written instrument” and, therefore, “must be read in view of the specification, of which they are a part.”¹⁵ In fact, the specification is “the single best guide to the meaning of a disputed term” and is often dispositive.¹⁶ “It is therefore entirely appropriate for a court, when conducting claim construction, to rely heavily on the written description for guidance as to the meaning of the claims.”¹⁷ Nevertheless, the Court must be careful not to read a limitation into a claim from the specification.¹⁸ In particular, the Court cannot limit the invention to the specific examples or preferred embodiments found in the specification.¹⁹ In

¹³ *Phillips*, 415 F.3d at 1313.

¹⁴ *Id.* at 1316.

¹⁵ *Id.* at 1315.

¹⁶ *Id.* (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

¹⁷ *Id.* at 1317.

¹⁸ *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 904 (Fed. Cir. 2004).

¹⁹ *Phillips*, 415 F.3d at 1323; see also *Resonate Inc. v. Alteon Websystems, Inc.*, 338 F.3d 1360, 1364-65 (Fed. Cir. 2003) (“[A] particular embodiment appearing in the written description may not be read into a claim when the claim language is

addition to the specification, the prosecution history may be used to determine if the patentee limited the scope of the claims during the patent prosecution.²⁰ The prosecution history helps to demonstrate how the patentee and the Patent and Trademark Office (“PTO”) understood the patent.²¹ However, because the prosecution history represents the ongoing negotiations between the PTO and the patentee, rather than a final product, it is not as useful as the specification for claim construction purposes.²²

Extrinsic evidence – such as expert and inventor testimony, dictionaries, and learned treatises – is only considered when the claim language remains genuinely ambiguous after considering all of the patent’s intrinsic evidence.²³ Although less reliable than the patent and prosecution history in determining construction of claim terms, extrinsic evidence may be used to help the Court understand the technology or

broader than the embodiment.”).

²⁰ *Southwall Techs., Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1576 (Fed. Cir. 1995).

²¹ *Phillips*, 415 F.3d at 1317.

²² *Id.*

²³ *Tegal Corp. v. Tokyo Electron America, Inc.*, 257 F.3d 1331, 1342 (Fed. Cir. 2001).

educate itself about the invention.²⁴ In particular, because technical dictionaries collect accepted meanings for terms in various scientific and technical fields, they can be useful in claim construction by providing a better understanding of the underlying technology and the way in which one skilled in the art might use the claim terms.²⁵ But extrinsic evidence, including dictionary definitions, cannot be used to vary or contradict the terms of the patent claims.²⁶

III. Discussion

A. “element”

The parties first dispute the meaning of the term “element.” Rothschild contends that no construction is necessary because “element” is a term with an ordinary meaning that is widely understood.²⁷ Alternatively, if a construction is necessary, Rothschild argues that “element” means “a component.”²⁸ Coca-Cola

²⁴ *Phillips*, 415 F.3d at 1317; *Vitronics Corp.*, 90 F.3d at 1584.

²⁵ *Phillips*, 415 F.3d at 1318.

²⁶ *Tegal Corp.*, 257 F.3d at 1342; *see also Vitronics Corp.*, 90 F.3d at 1584 n.6 (courts are free to consult dictionaries “so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents”); *Phillips*, 415 F.3d at 1322-23.

²⁷ Pl.’s Opening Claim Construction Br., at 10.

²⁸ *Id.*

asserts that the term means “a component.”²⁹ The Court finds that no construction is necessary. “Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement.”³⁰ However, “[i]t is not an obligatory exercise in redundancy.”³¹ The purpose of claim construction is to resolve actual disputes about the scope of claims raised by the parties and to assist the jury so it “will be able to ‘intelligently determine the questions presented.’”³²

Here, there is no reason to depart from the plain and ordinary meaning of “element.” The language of Claim 11 provides sufficient context for interpreting and applying the term “element,” and nothing in the intrinsic record of the patent suggests that “element” departs from its ordinary meaning. The claim describes an “element of a beverage,”³³ which a jury will readily be able to apply based upon its plain meaning. Defining “element” as “component” would not assist the jury in determining the

²⁹ Def.’s Responsive Claim Construction Br., at 2.

³⁰ *U.S. Surgical Corp. v. Ethicon, Inc.*, 103 F.3d 1554, 1568 (Fed. Cir. 1997).

³¹ *Id.*

³² *See Sulzer Textil A.G. v. Picanol N.V.*, 358 F.3d 1356, 1366 (Fed. Cir. 2004) (quoting *Shad v. Dean Witter Reynolds, Inc.*, 799 F.2d 525, 532 (9th Cir. 1986).

³³ ‘377 Patent, 9:44-45.

issues presented to it. Instead, it merely replaces the term with a synonym that does not improve comprehension.³⁴ This would be an exercise in redundancy. There is also no material dispute between the parties as to the scope of this claim term. Therefore, the Court declines to construct the term “element.”

B. “coupling”

Next, the parties contest the meaning of the term “coupling.” The claim describes “at least one valve coupling the at least one compartment to a dispensing section” and “the controller coupled to the communication module.”³⁵ Rothschild argues that no construction is necessary.³⁶ Alternatively, if a construction is necessary, it argues that coupling means “connecting.”³⁷ Coca-Cola asserts that it means “connecting.”³⁸ The Court finds that no construction is necessary. There is no reason to deviate from the plain and ordinary meaning of “coupling,” and construction of the

³⁴ See *Luminara Worldwide, LLC v. Liown Elecs. Co. Ltd.*, No. 14-cv-3103, 2016 WL 706190, at *12 (D. Minn. Feb. 22, 2016) (“Replacing ‘chaotic’ with ‘unpredictable’ or ‘without a specific pattern’ simply substitutes equally-understandable words for the inventor’s already-understandable claim language and is unnecessary.”).

³⁵ ‘377 Patent, 9:46-47; 9:59.

³⁶ Pl.’s Opening Claim Construction Br., at 12-13.

³⁷ *Id.*

³⁸ Def.’s Responsive Claim Construction Br., at 3.

term will not aid the jury. The jury will be able to use the context of the term in the claim language and the plain meaning of “coupling” to properly decide the issues presented to it. There is also no real dispute between the parties as to the scope of the term “coupling.” Therefore, the Court adopts the plain and ordinary meaning of “coupling.”

C. “dispensing section”

Next, the parties dispute the meaning of the term “dispensing section.” Coca-Cola argues that it means “a component for directing the flow of a mixed beverage.”³⁹ Rothschild contends that it means “a component for directing the flow of a beverage.”⁴⁰ Essentially, the parties dispute whether the beverage must have been mixed before entering the dispensing section, or whether it can be mixed in the dispensing section.

The Court finds that Rothschild’s construction is more appropriate. The claim language itself does not provide much guidance. The claim describes “a dispensing section configured to dispense the beverage.”⁴¹ However, the specification supports Rothschild’s definition. When describing the preferred embodiments, the specification

³⁹ Def.’s Responsive Claim Construction Br., at 3-5.

⁴⁰ Pl.’s Opening Claim Construction Br., at 11-12.

⁴¹ ‘377 Patent, 9:47-48.

provides two versions of the dispensing section. In one, “[t]he dispensing section will mix the various elements and direct the mixture into a receptacle, e.g., a cup, bottle, can, etc.”⁴² It goes on to say that “[a]lternatively, the tubing will led [sic] to a mixing chamber to mix the various elements before allowing the mixture to flow to the dispensing section.”⁴³ In other words, the specification describes two embodiments of the dispensing section: one that mixes the beverage itself, and one where the beverage has already been mixed before it enters the dispensing section. Coca-Cola’s proposed construction improperly limits the claim to only one of these embodiments. Because the claims should at the very least encompass examples in the specification, the Court finds that Rothschild’s definition is more appropriate.⁴⁴

Coca-Cola argues that “dispensing section” and “mixing chamber” are listed as two separate elements in the claim itself, and that the clear implication is that they “cannot be one and the same.”⁴⁵ Coca-Cola cites *Becton, Dickinson & Co. v. Tyco*

⁴² *Id.* at 6:40-42.

⁴³ *Id.* at 6:42-44.

⁴⁴ *See SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005) (“A claim construction that excludes a preferred embodiment, moreover, is ‘rarely, if ever, correct.’”).

⁴⁵ Def.’s Responsive Claim Construction Br., at 3-4.

Healthcare Grp., LP to support this argument.⁴⁶ However, *Becton* does not stand for the proposition that separately listed parts of a claim are *always* distinct elements. Instead, in *Becton*, the court construed the claim terms as requiring separate structures, and cited their separate listing in the claim as evidence of this.⁴⁷ The court did not hold that separate elements of a claim must always be interpreted as distinct parts. And, nothing in the claim language at issue here suggests that the mixing chamber and dispensing section *must* be separate components. In fact, the specification itself explicitly describes an embodiment where the dispensing section and mixing chamber are combined. Therefore, Coca-Cola's argument is unpersuasive.

D. "mixing chamber"

The parties next dispute the meaning of the phrase "mixing chamber." The claim describes "a mixing chamber for mixing the beverage."⁴⁸ Rothschild argues that this phrase means "an area where beverage elements are combined."⁴⁹ Coca-Cola

⁴⁶ 616 F.3d 1249 (Fed. Cir. 2010).

⁴⁷ See *Becton*, 616 F.3d at 1254 ("There is nothing in the asserted claims to suggest that the hinged arm and the spring means can be the same structure."); see also *Skedco, Inc. v. Strategic Operations, Inc.*, 685 F. App'x 956, 960 (Fed. Cir. 2017) (distinguishing *Becton* and noting that the court there "specifically *construed* the terms as requiring separate structures" and that an alternative construction "would have rendered the claims nonsensical").

⁴⁸ '377 Patent, 9:49.

⁴⁹ Pl.'s Opening Claim Construction Br., at 13-14.

contends that it means “a component for holding and mechanically blending all of the elements required to produce the beverage, when actuated by the controller.”⁵⁰

The Court finds that Rothschild’s construction is more appropriate. Coca-Cola’s contention that the mixing chamber must “hold and mechanically blend[] all of the elements” is not supported by the intrinsic record. First, nothing in the claim language or the specification suggests that the mixing chamber must *hold* the elements of the beverage. The claim itself simply states that the mixing chamber will “mix[] the beverage.”⁵¹ It does not say that the mixing chamber will hold *and* mix the elements of the beverage. Instead, Coca-Cola seems to have drawn this from thin air. This construction would improperly add a limitation that the claim itself does not contain. Coca-Cola’s interpretation would preclude a mixing chamber that mixes the elements as they pass through the chamber without being held. Since this limitation is not present in the claim, a construction requiring the mixing chamber to “hold” the elements is improper.

Furthermore, the claim language and specification do not indicate that the mixing chamber must “mechanically” blend the elements of the beverage. It would be improper for the Court to include a “mechanical” limitation in the claim construction

⁵⁰ Def.’s Opening Claim Construction Br., at 10-11.

⁵¹ ‘377 Patent, 9:49.

that is not present in the claim. The claim only states that the mixing chamber “mixes” the beverage – it does not say that it must mechanically mix it. There are other possible ways that the mixing chamber could conceivably mix the different elements, such as with pressure. Consequently, Coca-Cola’s construction is not proper.

Coca-Cola also argues that its definition is more accurate because the claim provides that the controller will “actuate the mixing chamber.”⁵² Coca-Cola contends that a passive, non-mechanical device cannot be “actuated.” Instead, the mixing chamber must be active. However, even if this is true, this still does not require that the active mixing be “mechanical.” There are other ways that the dispenser could “actively” mix the elements besides mechanically mixing them. Furthermore, the Court disagrees that “actuate the mixing chamber” requires the mixing chamber to take on an “active” role. It still makes logical sense for the controller to actuate a passive mixing process in the mixing chamber. Even if it is passive, a process that mixes the elements has been “actuated” when it mixes the elements. Therefore, the Court adopts Rothschild’s construction of “mixing chamber.”

E. “user interface module”

Next, the parties dispute the meaning of the phrase “user interface module.” The claim describes “a user interface module configured to receive an[] identity of a

⁵² Def.’s Opening Claim Construction Br., at 11.

user and an identifier of the beverage.”⁵³ Rothschild argues that it means “a component that enables communication between a user and a dispenser.”⁵⁴ Coca-Cola contends that it means “a component of the beverage dispenser that enables direct communication between a user and the dispenser.”⁵⁵ The key difference between these constructions is that Coca-Cola’s construction requires the user interface module to physically be a component of the beverage dispenser. The Court concludes that Coca-Cola’s definition is more appropriate.

The claim describes a beverage dispenser “comprising,” among other things, a “user interface module.” A beverage dispenser “comprising” parts such as a mixing chamber, valves, and a user interface module is most naturally read to physically be made up of these different parts. The claim is describing the main components of the dispenser itself. A person of ordinary skill in the relevant art would most logically understand this claim language to describe a user interface module that is physically part of the beverage dispenser.⁵⁶ Rothschild argues that the dispenser could be

⁵³ ‘377 Patent, 9:50-51.

⁵⁴ Pl.’s Opening Claim Construction Br., at 15-16.

⁵⁵ Def.’s Notice of Claim Construction Positions, Ex. A.

⁵⁶ *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1313 (Fed. Cir. 2005).

comprised of various elements in separate physical or geographic locations.⁵⁷ However, given the context of “user interface module” in the claim language with the valves, mixing chamber, and other parts of the dispenser, a person of ordinary skill would understand the patent to be describing the physical components of the beverage dispenser itself.

Furthermore, the components of the system that are not physically part of the dispenser, such as the network and the server, are not described by the claim to be parts that “comprise” the beverage dispenser. Instead, they are described in relation to the parts that *are* physically comprising the beverage dispenser. For example, the claim describes a beverage dispenser “comprising” a communication module, which is physically part of the dispenser, that is configured to transmit to a server, which is not physically part of the dispenser.⁵⁸ The dispenser is not comprised of a “server,” even though a server is part of the overall system for creating a personalized beverage.

Rothschild also emphasizes that the specification states that the user interface module “will enable communications between the user and the dispenser via a keyboard, voice recognition module, WiFi communication . . . , RFID communications, infrared communication, Bluetooth, or any other type of

⁵⁷ Pl.’s Responsive Claim Construction Br., at 16.

⁵⁸ ‘377 Patent, 9:52-54.

communication now known or practiced in the future that will allow the user to identify themselves and/or input information to the beverage dispenser.”⁵⁹ According to Rothschild, any type of communication is included in the claim, and not just direct communication. Although this language is broad, it should be interpreted as envisioning any possible form of communication between the user and the user interface module which is physically part of the dispenser. Even if the user can communicate with the user interface module with any possible form of communication, the claim indicates that the user interface module still must physically be a part of the dispenser. Therefore, the Court adopts Coca-Cola’s proposed construction.

F. “actuate”

The parties next dispute the meaning of the term “actuate.” The claim describes a “controller coupled to the communication module and configured to actuate the at least one valve to control an amount of the element to be dispensed and to actuate the mixing chamber.”⁶⁰ Rothschild contends that no construction is necessary and that “actuate” should be attributed its ordinary meaning.⁶¹ In the alternative, Rothschild

⁵⁹ Pl.’s Opening Claim Construction Br., at 15-16; *see also* ‘377 Patent, 7:43-49.

⁶⁰ ‘377 Patent, 9:60-63.

⁶¹ Pl.’s Opening Claim Construction Br., at 16.

argues that “actuate” should mean “put into action.”⁶² Coca-Cola argues that “actuate” should mean “put into action.”⁶³ The Court finds that no construction is necessary. The parties have presented no material dispute as to the scope of the term “actuate,” and defining “actuate” as “put into action” will not aid the jury in deciding the issues presented to it. Therefore, no construction is necessary.

G. “server”

Next, the parties dispute the meaning of the term “server.” Rothschild argues that no construction is necessary because “server” has a widely understood ordinary meaning.⁶⁴ Coca-Cola asserts that “server” means “a computerized database on which the user’s product preferences are stored.”⁶⁵ The Court finds that a construction is necessary. “[W]hen a district court concludes that a disputed term requires no construction it may err if the disputed term has several ordinary meanings or failing to construe the term leaves the parties’ dispute unresolved.”⁶⁶ The Court would be

⁶² *Id.*

⁶³ Def.’s Responsive Claim Construction Br., at 9.

⁶⁴ Pl.’s Opening Claim Construction Br., at 17.

⁶⁵ Def.’s Responsive Claim Construction Br., at 9-10.

⁶⁶ *Kason Indus., Inc. v. Component Hardware Grp., Inc.*, No. 3:13-cv-12-TCB, 2014 WL 10588312, at *5 (N.D. Ga. Jan. 31, 2014) (citing *02 Micro Int’l Ltd. v. Beyond Innovation Tech. Co.*, 521 F.3d 1351, 1361 (Fed. Cir. 2008)).

committing error if it did not construe the term “server.” The parties dispute the scope of the term. Coca-Cola requests a narrow construction, contending that “server” is limited to a database on which the product preferences are stored, while Rothschild argues that the “server” can do much more than just store information.

However, the intrinsic record does not support Coca-Cola’s narrow construction. Although part of the server’s function may include storing certain information in a database, the claim language itself describes a server that does more than this. The claim describes a server that can also transmit “user generated beverage product preferences based on the identity of the user and the identifier of the beverage.”⁶⁷ Thus, the server is not just a device used for storing information.

The specification also supports a broader construction. The specification states that the server performs a number of different tasks. It says that the server will “instruct the hardware mixing the solids and fluids of the user’s preferences,” which entails more than merely storing the user’s preferences. The specification further states that the server “tells the product container how to mix the various elements contained in the product container so that the final product mix conforms to what the . . . server has determined would be appropriate for the consumer.”⁶⁸ Furthermore,

⁶⁷ ‘377 Patent, 9:54-55.

⁶⁸ ‘377 Patent, 2:44-47.

“[t]he server will formulate the proper mix of elements . . . for the product according to the user’s product preferences” and will “transmit the proper formulation to the terminal which will communicate the formulation to the product.”⁶⁹ In one embodiment, the server transmits a questionnaire, and then uses a software algorithm to determine a user’s product preferences and the proper mix of elements based upon the responses to the questionnaire.⁷⁰ Then, once this is determined, the server stores those preferences. These functions include much more than merely storing the user’s preferences. Therefore, Coca-Cola’s proposed construction is too narrow.

The Court finds that “server” should be defined as “a computer in a network that is used to provide services, such as access to files or shared peripherals or the routing of e-mail, to other computers in a network,” as the dictionary defines the term.⁷¹ Courts are free to rely upon dictionary definitions to properly construe a term, as long as they are not used to vary or contradict the claim language and specification.⁷² Dictionary definitions are useful tools in claim interpretation for understanding the ordinary meaning of a term, but courts should not allow them to

⁶⁹ *Id.* at 2:61-65, 3:1-5.

⁷⁰ *Id.* at 7:15-29.

⁷¹ *Server*, MERRIAM-WEBSTER’S DICTIONARY (2017).

⁷² *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1584 n.6 (Fed. Cir. 1996).

supplant the role of the claim language and specification.⁷³ Here, the intrinsic record supports this construction because it better encompasses the variety of tasks that the claim and specification envision the server performing. “The construction that stays true to the claim language and most naturally aligns with the patent’s description of the invention will be, in the end, the correct construction.”⁷⁴ This interpretation of “server” comports best with the claim itself and corresponds with how an ordinary person of skill in the art would read the patent as a whole.

H. “communication module”

The parties next dispute the meaning of the term “communication module.” The claim describes a

communication module configured to transmit the identity of the user and the identifier of the beverage to a server over a network, receive user generated beverage product preferences based on the identity of the user and the identifier of the beverage from the server and communication the user generated beverage product preferences to controller.⁷⁵

Rothschild contends that this term means “a component that enables communication between the dispenser and a computer on a network.”⁷⁶ Coca-Cola argues that it means

⁷³ See *Phillips v. AWH Corp.*, 415 F.3d 1303, 1322-23 (Fed. Cir. 2005).

⁷⁴ *Renishaw PLC v. Marposs Societa’ per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998).

⁷⁵ ‘377 Patent, 9:52-58.

⁷⁶ Pl.’s Opening Claim Construction Br., at 14-15.

“a component of the beverage dispenser that enables communication between the dispenser and the server.”⁷⁷ Thus, the key differences are whether the communication module is part of the dispenser, and whether the communication is with the server or with a computer on the network. The Court agrees with Coca-Cola’s construction.

First, Coca-Cola’s construction is more appropriate because it requires communication with the server, as opposed to communication with a computer on a network. The claim language itself clearly states that the communication module will “transmit the identity of the user and the identifier of the beverage to a *server over the network*,” will receive user generated product preferences “from the server,” and communicate the product preferences to the controller.⁷⁸ Thus, the claim language itself expressly requires the dispenser to communicate to a server, and not a “computer on the network” as Rothschild claims.

Furthermore, Coca-Cola’s interpretation is preferable because it describes the communication module as a physical part of the beverage dispenser. The claim language states that the beverage dispenser “comprises” the communication module. As described above with regard to “user interface module,” a person of ordinary skill in the art would interpret this to mean that the communication module is a physical

⁷⁷ Def.’s Notice of Claim Construction Positions, Ex. A.

⁷⁸ ‘377 Patent, 9:52-58.

component of the beverage dispenser. Therefore, the Court adopts Coca-Cola's construction.

I. “configured to actuate the at least one valve to control an amount of the element to be dispensed . . . based on the user gene[r]ated product preferences”

Next, the parties dispute the meaning of the phrase “the controller . . . configured to actuate the at least one valve to control an amount of the element to be dispensed . . . based on the user gene[r]ated product preferences.”⁷⁹ Rothschild argues that this phrase means “capable of causing a valve to dispense an amount of a beverage element into a mixing chamber.”⁸⁰ Coca-Cola argues that this means “able to cause the valve to dispense the amount of each element specified by the user to be included in the final product.”⁸¹ The Court agrees with Rothschild's construction.

First, the claim language itself does not require that the valve dispense specific amounts of each element specified by the user. Instead, the claim only states that the valve controls “an amount of the element to be dispensed . . . based on the user gene[r]ated beverage product preferences.”⁸² Although the amount is based on the user

⁷⁹ *Id.* at 9:60-63.

⁸⁰ Pl.'s Opening Claim Construction Br., at 19.

⁸¹ Def.'s Opening Claim Construction Br., at 18-19.

⁸² '377 Patent, 9:60-63.

generated product preferences, this does not necessarily mean that the user has to specify the amount of each individual element of the beverage. Instead, the amounts dispensed of each element could be based on more general preferences of how the user prefers the drink. A user could input preferences for the beverage without specifying the amount of each individual element. This comports more naturally with the language of the claim.

And, the specification further supports this construction. One embodiment in the specification describes a process where the user answers a questionnaire, which the server then uses to determine the user's beverage preferences and creates the proper mix of elements.⁸³ In such a situation, the user would not be specifying the specific amounts of each element. Instead, the server is using a software algorithm to determine what elements should be mixed to match the general preferences in the questionnaire. It would be error for the Court to exclude a preferred embodiment such as this from the scope of the patent.⁸⁴

Coca-Cola argues that the “specification repeatedly discloses embodiments in which the user can . . . specify the amount of each element to be included.”⁸⁵ However,

⁸³ *Id.* at 7:15-38.

⁸⁴ *SanDisk Corp. v. Memorex Prods., Inc.*, 415 F.3d 1278, 1285 (Fed. Cir. 2005).

⁸⁵ Def.'s Responsive Claim Construction Br., at 14.

it is improper to import limitations from the specification into the claim, as Coca-Cola attempts to do here.⁸⁶ The Federal Circuit has noted that doing so is “one of the cardinal sins of patent law.”⁸⁷ The claim language, and not the specification, establishes the metes and bounds of a patent.⁸⁸ Requiring the user to input specific amounts of each element would improperly import a limitation from the specification into the claim. Therefore, Coca-Cola’s interpretation is not appropriate.

J. “the controller . . . configured . . . to actuate the mixing chamber based on the user generated product preferences”

Finally, the parties dispute the meaning of the phrase “the controller . . . configured . . . to actuate the mixing chamber based on the user gene[r]ated product preferences”⁸⁹ Rothschild contends that this phrase means “capable of causing the mixing chamber to mix a beverage responsive to user’s beverage product

⁸⁶ *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (“[A]lthough the specification often describes very specific embodiments of the invention, we have repeatedly warned against confining the claims to those embodiments.”).

⁸⁷ *Id.* (quoting *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1340 (Fed. Cir. 2001)).

⁸⁸ *Smithkline Diagnostics, Inc. v. Helena Labs, Corp.*, 859 F.2d 878, 882 (Fed. Cir. 1988).

⁸⁹ ‘377 Patent, 9:59-63.

preference.”⁹⁰ Coca-Cola argues that this means “able to cause the mixing chamber to hold and mix the elements of the final product responsive to the user’s beverage preferences.”⁹¹ The key difference is whether the mixing chamber must hold and mix the elements of the beverage. The Court rules that Rothschild’s construction should be adopted.

As described above, no part of the intrinsic record requires the mixing chamber to “hold” the elements of the beverage for any period of time when it mixes them. The claim only states that the mixing chamber will “mix[] the beverage” and that the controller “actuate[s] the mixing chamber.” This would improperly import a limitation not present in the claim itself. Therefore, Rothschild’s construction is more appropriate.

IV. Conclusion

For the reasons set forth above, the Court construes the disputed terms as follows:

Term	Construction
“element”	Plain and ordinary meaning
“coupling”	Plain and ordinary meaning

⁹⁰ Pl.’s Opening Claim Construction Br., at 20.

⁹¹ Def.’s Responsive Claim Construction Br., at 15.

“dispensing section”	“a component for directing the flow of a beverage”
“mixing chamber”	“an area where beverage elements are combined”
“user interface module”	“a component of the beverage dispenser that enables direct communication between a user and the dispenser”
“actuate”	Plain and ordinary meaning
“server”	“a computer in a network that is used to provide services, such as access to files or shared peripherals or the routing of e-mail, to other computers in a network”
“communication module”	“a component of the beverage dispenser that enables communication between the dispenser and the server”
“configured to actuate the at least one valve to control an amount of the element to be dispensed . . . based on the user gene[r]ated product preferences”	“capable of causing a valve to dispense an amount of a beverage element into a mixing chamber”
“the controller . . . configured . . . to actuate the mixing chamber based on the user gene[r]ated product preferences”	“capable of causing the mixing chamber to mix a beverage responsive to user’s beverage product preference”

SO ORDERED, this 9 day of November, 2017.

/s/Thomas W. Thrash
THOMAS W. THRASH, JR.
United States District Judge